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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,402	02/20/2007	Daniel Bell	13353.0028USWO	3761
23552	7590	01/07/2011		
MERCHANT & GOULD PC			EXAMINER	
P.O. BOX 2903			EGWIM, KELECHI CHIDI	
MINNEAPOLIS, MN 55402-0903				
		ART UNIT	PAPER NUMBER	
		1762		
		MAIL DATE	DELIVERY MODE	
		01/07/2011	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/575,402

**Applicant(s)**

BELL ET AL.

**Examiner**

Dr. Kelechi C. Egwim

**Art Unit**

1762

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 50,52-54,56-61,63,65-78,80-82 and 84-98 is/are pending in the application.
- 4a) Of the above claim(s) 61,63,65-78,80-82 and 84-98 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 50,52-54 and 56-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of Filing/Amendments Filed (PTO-502)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of the polymer article in the reply filed on 11/08/2010 is acknowledged. The traversal is on the ground(s) that the article is not anticipated by the prior art. This is not found persuasive because, as demonstrated below, Claim 50 is anticipated by, or at least obvious over several prior art. Consequently, the special technical feature which links the claims, the polymer article, still does not provide a contribution to the prior art, so unity of invention is lacking.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 78, 80-82 and 84-98 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

3. Newly amended claims 61, 63 and 65-77 are also directed to an invention that is independent or distinct from the elected the polymer article for the following reasons: These claims read on a method of preparing a composite. As unity of invention is lacking and the search for the elected article does not require the search for the particulars of this process, restriction is proper.

Accordingly, claims 61, 63 and 65-77 are also withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 102/103***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 50, 52-54 and 56-60 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, 35 U.S.C. 103(a) as being unpatentable over Philips (USPN 4,471,009), Sakamoto et al. (USPN 5,006,589), Siddiqui (USPN 5,132,356), Fujimoto et al. (USPN 5,318,833) or Scarlett (USPN 6,399,689).

Each of Philips (col. 2, lines 65-67 and col. 4, line 63 to col. 5, line 12), Sakamoto et al. (abstract), Siddiqui (abstract and col. 3, lines 3-12), Fujimoto et al. (abstract) and Scarlett (col. 1, lines 14-16, col. 2, line 66 to col. 3, line 5) individually teach polymer articles comprising a thermosetting polyester or polyurethane matrix polymer and inorganic particulate material having average particle sizes with the claimed, at a particle loading within the claimed range, based on the total weight of the polymer and inorganic material components.

While the prior art do not specifically discuss gas bubbles and interparticle distance, in page 3, lines 5-9 of the present specification, applicant describes that "by using particles within the above range and at a loading less than the upper limit of particle loading, particulate material can be mixed into the polymer in a mixing regime which ensures no agglomeration of the particles within the polymer matrix and even dispersion of the particles throughout the polymer matrix and substantially no air or gas bubbles in the article."

Thus, it is reasonable that the articles of Philips , Sakamoto et al., Siddiqui, Fujimoto et al. and Scarlett would possess the presently claimed properties since each uses particles within the claimed range and at a loading less than the claimed upper limit of particle loading. The articles in the cited prior art are essentially the same as the claimed article and the USPTO does not have at its disposal the tools or facilities deemed necessary to make physical determinations of the sort. In any event, an otherwise old composition is not patentable regardless of any new or unexpected properties. In re Fitzgerald et al , 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112 - § 2112.02.

Even if assuming that the prior art references do not meet the requirements of 35 U.S.C. 102, it would still have been obvious to one of ordinary skill in the art, at the time the invention was made, to arrive at the same inventive composition because the disclosure of the inventive subject matter appears within the generic disclosure of the prior art.

7. The following prior art made of record, though not relied upon, are considered pertinent to applicant's disclosure: USPN 6,849,325, USPN 7,297,375, USPN 4,877,819 and USPN 6,046,267.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kelechi C. Egwim whose telephone number is (571) 272-1099. The examiner can normally be reached on M-T (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dr. Kelechi C. Egwim/  
Primary Examiner, Art Unit 1762

KCE